AMENDMENTS TO THE CLAIMS

CLAIMS 1-35 (CANCELED).

CLAIM 36 (CURRENTLY AMENDED): A rotation control apparatus for a bicycle device comprising:

a rotating member that rotates around a rotational axis, wherein the rotating member has a bias coupling portion;

a reference member;

wherein the rotating member is carried by the reference member so that the rotating member and the reference member move together as a unit;

a biasing mechanism coupled between the reference member and the bias coupling portion of the rotating member, wherein the biasing mechanism has a biasing vector that biases the rotating member for rotation in a first direction; and

a biasing vector moving mechanism that moves the biasing vector relative to the bias coupling portion of the rotating member so that the biasing vector biases the rotating member for rotation in a second direction that is different from the first direction.

CLAIM 37 (PREVIOUSLY PRESENTED): The apparatus according to claim 36 wherein the second direction is opposite the first direction.

CLAIM 38 (PREVIOUSLY PRESENTED): The apparatus according to claim 36 wherein the rotating member has a pivot reference axis extending from the rotational axis through the bias coupling portion, wherein the biasing vector moving mechanism moves the biasing vector so that the biasing vector changes from pointing to a first side of the pivot reference axis to pointing toward a second side of the pivot reference axis.

CLAIM 39 (PREVIOUSLY PRESENTED): The apparatus according to claim 36 wherein the biasing mechanism comprises a spring.

CLAIM 40 (PREVIOUSLY PRESENTED): The apparatus according to claim 39 wherein the biasing mechanism comprises a coil spring having a first end and a second end, wherein the first

end is coupled to the reference member and the second is coupled to the bias coupling portion of the rotating member.

CLAIM 41 (PREVIOUSLY PRESENTED): The apparatus according to claim 40 wherein the rotating member has a pivot reference axis extending from the rotational axis through the bias coupling portion, wherein the second end of the coil spring creates the biasing vector, wherein the rotating member is biased for rotation in the first direction when the first end of the coil spring is disposed on a first side of the pivot reference axis, and wherein the rotating member is biased for rotation in the second direction when the first end of the coil spring is disposed on a second side of the pivot reference axis.

CLAIM 42 (PREVIOUSLY PRESENTED): The apparatus according to claim 40 wherein the rotating member has a pivot reference axis extending from the rotational axis through the bias coupling portion, wherein the second end of the coil spring creates the biasing vector, wherein the coil spring has a center of bias, wherein the rotating member is biased for rotation in the first direction when the center of bias is disposed on a first side of the pivot reference axis, and wherein the rotating member is biased for rotation in the second direction when the center of bias is disposed on a second side of the pivot reference axis.

CLAIM 43 (PREVIOUSLY PRESENTED): The apparatus according to claim 36 wherein the biasing vector moving mechanism comprises a rotating mechanism that rotates the rotating member.

CLAIM 44 (PREVIOUSLY PRESENTED): The apparatus according to claim 36 wherein the rotating member comprises a pawl.

CLAIM 45 (PREVIOUSLY PRESENTED): The apparatus according to claim 44 wherein the pawl has a pawl tooth, and wherein the bias coupling portion is spaced apart from the pawl tooth.

CLAIM 46 (PREVIOUSLY PRESENTED): The apparatus according to claim 45 wherein the rotating member has a pivot reference axis extending from the rotational axis through the bias coupling portion, and wherein the biasing vector moving mechanism moves the biasing vector so

that the biasing vector changes from pointing to a first side of the pivot reference axis to pointing toward a second side of the pivot reference axis.

CLAIM 47 (PREVIOUSLY PRESENTED): The apparatus according to claim 46 wherein the bias coupling portion of the pawl comprises an elongated portion extending from the rotational axis.

CLAIM 48 (PREVIOUSLY PRESENTED): The apparatus according to claim 46 wherein the biasing mechanism comprises a spring.

CLAIM 49 (PREVIOUSLY PRESENTED): The apparatus according to claim 48 wherein the biasing mechanism comprises a coil spring having a first end and a second end, wherein the first end is coupled to the reference member and the second is coupled to the bias coupling portion of the pawl.

CLAIM 50 (PREVIOUSLY PRESENTED): The apparatus according to claim 49 wherein the bias coupling portion of the pawl comprises an elongated portion extending from the rotational axis.

CLAIM 51 (PREVIOUSLY PRESENTED): The apparatus according to claim 50 wherein the second end of the coil spring creates the biasing vector, wherein the rotating member is biased for rotation in the first direction when the first end of the coil spring is disposed on a first side of the pivot reference axis, and wherein the rotating member is biased for rotation in the second direction when the first end of the coil spring is disposed on a second side of the pivot axis.

CLAIM 52 (PREVIOUSLY PRESENTED): The apparatus according to claim 51 wherein the second direction is opposite the first direction.

CLAIM 53 (PREVIOUSLY PRESENTED): The apparatus according to claim 50 wherein the rotating member has a pivot reference axis extending from the rotational axis through the bias coupling portion, wherein the second end of the coil spring creates the biasing vector, wherein the coil spring has a center of bias, wherein the rotating member is biased for rotation in the first direction when the center of bias is disposed on a first side of the pivot reference axis, and wherein

the rotating member is biased for rotation in the second direction when the center of bias is disposed on a second side of the pivot reference axis.

CLAIM 54 (PREVIOUSLY PRESENTED): The apparatus according to claim 53 wherein the second direction is opposite the first direction.

CLAIM 55 (PREVIOUSLY PRESENTED): A bicycle transmission operating device comprising:

an output transmission member that moves between at least a first output position and a second output position;

an upshift mechanism that moves the output transmission member from the first output position to the second output position;

a downshift mechanism that moves the output transmission member from the second output position to the first output position; and

a shift control mechanism that operates one of the upshift mechanism and the downshift mechanism; and

wherein the shift control mechanism comprises:

a rotating member that rotates around a rotational axis, wherein the rotating member has a bias coupling portion;

a reference member;

a biasing mechanism coupled between the reference member and the bias coupling portion of the rotating member, wherein the biasing mechanism has a biasing vector that biases the rotating member for rotation in a first direction; and

a biasing vector moving mechanism that moves the biasing vector relative to the bias coupling portion of the rotating member so that the biasing vector biases the rotating member for rotation in a second direction that is different from the first direction.

CLAIM 56 (PREVIOUSLY PRESENTED): The apparatus according to claim 55 wherein the second direction is opposite the first direction.

CLAIM 57 (PREVIOUSLY PRESENTED): The apparatus according to claim 55 wherein the rotating member has a pivot reference axis extending from the rotational axis through the bias coupling portion, wherein the biasing vector moving mechanism moves the biasing vector so that the biasing vector changes from pointing to a first side of the pivot reference axis to pointing toward a second side of the pivot reference axis.

CLAIM 58 (PREVIOUSLY PRESENTED): The apparatus according to claim 55 wherein the biasing mechanism comprises a spring.

CLAIM 59 (PREVIOUSLY PRESENTED): The apparatus according to claim 58 wherein the biasing mechanism comprises a coil spring having a first end and a second end, wherein the first end is coupled to the reference member and the second end is coupled to the bias coupling portion of the rotating member.

CLAIM 60 (PREVIOUSLY PRESENTED): The apparatus according to claim 59 wherein the rotating member has a pivot reference axis extending from the rotational axis through the bias coupling portion, wherein the second end of the coil spring creates the biasing vector, wherein the rotating member is biased for rotation in the first direction when the first end of the coil spring is disposed on a first side of the pivot reference axis, and wherein the rotating member is biased for rotation in the second direction when the first end of the coil spring is disposed on a second side of the pivot reference axis.

CLAIM 61 (PREVIOUSLY PRESENTED): The apparatus according to claim 59 wherein the rotating member has a pivot reference axis extending from the rotational axis through the bias coupling portion, wherein the second end of the coil spring creates the biasing vector, wherein the coil spring has a center of bias, wherein the rotating member is biased for rotation in the first direction when the center of bias is disposed on a first side of the pivot reference axis, and wherein the rotating member is biased for rotation in the second direction when the center of bias is disposed on a second side of the pivot reference axis.

CLAIM 62 (PREVIOUSLY PRESENTED): The apparatus according to claim 55 wherein the biasing vector moving mechanism comprises a rotating mechanism that rotates the rotating member.

CLAIM 63 (PREVIOUSLY PRESENTED): The apparatus according to claim 55 wherein the reference member comprises a drive member for communicating power from a rotating member of the bicycle transmission to the output transmission member.

CLAIM 64 (PREVIOUSLY PRESENTED): The apparatus according to claim 55 wherein the rotating member comprises a pawl.

CLAIM 65 (PREVIOUSLY PRESENTED): The apparatus according to claim 64 wherein the pawl has a pawl tooth, and wherein the bias coupling portion is spaced apart from the pawl tooth.

CLAIM 66 (PREVIOUSLY PRESENTED): The apparatus according to claim 65 wherein the rotating member has a pivot reference axis extending from the rotational axis through the bias coupling portion, and wherein the biasing vector moving mechanism moves the biasing vector so that the biasing vector changes from pointing to a first side of the pivot reference axis to pointing toward a second side of the pivot reference axis.

CLAIM 67 (PREVIOUSLY PRESENTED): The apparatus according to claim 66 wherein the bias coupling portion of the pawl comprises an elongated portion extending from the rotational axis.

CLAIM 68 (PREVIOUSLY PRESENTED): The apparatus according to claim 66 wherein the biasing mechanism comprises a spring.

CLAIM 69 (PREVIOUSLY PRESENTED): The apparatus according to claim 68 wherein the biasing mechanism comprises a coil spring having a first end and a second end, wherein the first end is coupled to the reference member and the second end is coupled to the bias coupling portion of the pawl.

CLAIM 70 (PREVIOUSLY PRESENTED): The apparatus according to claim 69 wherein the bias coupling portion of the pawl comprises an elongated portion extending from the rotational axis.

CLAIM 71 (PREVIOUSLY PRESENTED): The apparatus according to claim 70 wherein the second end of the coil spring creates the biasing vector, wherein the rotating member is biased for rotation in the first direction when the first end of the coil spring is disposed on a first side of the pivot reference axis, and wherein the rotating member is biased for rotation in the second direction when the first end of the coil spring is disposed on a second side of the pivot reference axis.

CLAIM 72 (PREVIOUSLY PRESENTED): The apparatus according to claim 71 wherein the second direction is opposite the first direction.

CLAIM 73 (PREVIOUSLY PRESENTED): The apparatus according to claim 72 wherein the reference member comprises a drive member for communicating power from a rotating member of the bicycle transmission to the output transmission member.

CLAIM 74 (PREVIOUSLY PRESENTED): The apparatus according to claim 70 wherein the rotating member has a pivot reference axis extending from the rotational axis through the bias coupling portion, wherein the second end of the coil spring creates the biasing vector, wherein the coil spring has a center of bias, wherein the rotating member is biased for rotation in the first direction when the center of bias is disposed on a first side of the pivot reference axis, and wherein the rotating member is biased for rotation in the second direction when the center of bias is disposed on a second side of the pivot reference axis.

CLAIM 75 (PREVIOUSLY PRESENTED): The apparatus according to claim 74 wherein the second direction is opposite the first direction.

CLAIM 76 (PREVIOUSLY PRESENTED): The apparatus according to claim 75 wherein the reference member comprises a drive member for communicating power from a rotating member of the bicycle transmission to the output transmission member.